# **Federal Operating Permit** Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

> Permittee Name: Hampton University Hampton University Facility Name: Facility Location: E. Queen Street

> > Hampton, Virginia 23668

Registration Number: 60106 Permit Number: TRO60106

June 21, 2004

Effective Date

August 16, 2006

Minor Modification Date

**June 21, 2009** 

**Expiration Date** 

Maria R. Nold, Deputy Regional Director

August 16, 2006

Signature Date

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# I. Facility Information

#### **Permittee**

Hampton University E. Queen Street Hampton, Virginia 23668

#### **Responsible Official**

Doretha J. Spells Vice President for Business Affairs and Treasurer

#### **Facility**

Hampton University E. Queen Street off of Interstate 64, downtown Hampton Hampton, Virginia 23668

#### **Contact Person**

Lowell Middleton Physical Plant Director (757) 727-5463

**AFS Identification Number:** 51-650-00010

Facility Description: NAICS Code 611310 – Hampton University is a co-educational institution of higher education located at E. Queen Street off of Interstate 64 near downtown Hampton, Virginia. The university operates a steam plant that supplies heat to the university's academic buildings, dormitories, and other campus buildings. The steam plant consists of six (6) boilers - two (2) coal-fired units each rated at 34 million Btu/hr, three (3) distillate oil-fired units, rated at 19, 23, and 28 million Btu/hr respectively, and one (1) paper/wood pellet-fired unit rated at 4 million Btu/hr. All of the steam plant units were constructed prior to 1972. The university also maintains on site a dry cleaning operation rated at 50 lbs/load and a natural gas/distillate oil-fired boiler at the University Cleaners rated at 4.184 million Btu/hr. The university also maintains two (2) natural gas/distillate oil-fired boilers, one rated at 3.348 million Btu/hr and the other rated at 3.313 million Btu/hr, at the E. Queen Street Dormitory and one (1) 600 kW diesel-fired emergency electric generator located at the university's museum. Insignificant emission units at the facility include emergency generators, a coal storage facility, a pelletizing facility, and diesel fuel storage tanks (located at the Steam Plant and throughout the campus).

# **II.** Significant Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity (million Btu/hour)*	Pollution Control Device (PCD) Description	PCD ID	Pollutant Controlled	Applicable Permit Date
Fuel Burnin	g Equipment						
1	ST-1	Riley Stoker Boiler (pre-1972), coal- fired	34	Gravity Settling Effect	n/a	PM	n/a
2	ST-1	Riley Stoker Boiler (pre-1972), coal- fired	34	Gravity Settling Effect	n/a	PM	n/a
3	ST-1	Riley Boiler (pre- 1972), diesel oil- fired	19	Gravity Settling Effect	n/a	PM	n/a
4	ST-1	Keeler Boiler (pre- 1972), diesel oil- fired	23	Gravity Settling Effect	n/a	PM	n/a
5	ST-1	Keeler Boiler (pre- 1972), diesel oil- fired	28	Gravity Settling Effect	n/a	PM	n/a
6	ST-1	Hurst Boiler (Model No. F 650; pre-1972), paper pellet/wood chip- fired	4	Hurst Settling Chamber	n/a	PM	n/a
7	ST-2	Cleaver Brooks Boiler (Model No. CB.200-100; installed 1985), natural gas/diesel oil-fired	4.184	n/a	n/a	n/a	n/a
8	ST-3	Burnham Boiler (Model No. 4 FL.360.A.45.LB; installed 1984), natural gas/diesel oil-fired	3.348	n/a	n/a	n/a	n/a

		Kewanee Boiler					1 4.50
9	ST-4	(Model No. M- 265-KO; installed 1977), natural gas/diesel oil-fired	3.313	n/a	n/a	n/a	n/a
EG-23	EG-23	Caterpillar Emergency Generator (located at the university's museum, installed 1997), diesel oil- fired	600 kW (896 BHP)	n/a	n/a	n/a	n/a
Dry Cleanin	g						
10	n/a	Dry Cleaning (Union, UN-L850 U2000 Series, dry- to-dry machine, including a totally enclosed condenser, unit manufactured in 2006)	50 lbs soiled clothing/load	n/a	n/a	VOC, HAP	n/a

<sup>\*</sup>The Size/Rated capacity is provided for informational purposes only and is not an applicable requirement.

# III. Fuel Burning Equipment Requirements – (Emission Unit ID Nos. 1 through 9 and EG-23)

# A. Limitations

- 1. Hampton University shall register with the Department of Environmental Quality (DEQ) and shall maintain such registration by submitting annual updates of registration information and emissions.

  (9 VAC 5-20-160)
- 2. The approved fuel for Unit Nos. 1 and 2 is bituminous coal. The approved fuel for Unit Nos. 3, 4, 5, and EG-23 is distillate oil. The approved fuels for Unit No. 6 are paper pellets and wood chips. The approved fuels for Unit Nos. 7, 8, and 9 are natural gas and distillate oil. Distillate oil is defined as fuel oil that meets the specifications for fuel oil numbers 1 or 2 under the American Society for Testing and Materials, ASTM D396-78 "Standard Specification for Fuel Oils." A change in the fuels may require a permit to modify and operate. (9 VAC 5-80-110)
- 3. Particulate emissions from Unit No. 6 shall be controlled by the use of a settling chamber. The settling chamber shall be installed in an accessible location and shall be maintained by the permittee such that it is in proper working order at all times. (9 VAC 5-80-110)
- 4. Particulate emissions from the facility's boilers combined (Unit Nos. 1 through 9) shall be determined by the following equation: E = 1.0906H<sup>-0.2594</sup>, where H is the total combined capacity in millions of Btu per hour and E is the maximum allowable emission rate in pounds of particulate per million Btu input. (9 VAC 5-80-110 and 9 VAC 5-40-900.A.1.b.)
- 5. The maximum allowable particulate emissions from each individual boiler (Unit Nos. 1 through 9) shall be established either as (1) the product of the unit's rated capacity and the fuel burning installation's particulate emission ratio determined in accordance with 9 VAC 5-40-900.A. or (2) through the emission allocation system under 9 VAC 5-40-910.

(9 VAC 5-80-110, 9 VAC 5-40-900.B.1. and 2, and 9 VAC 5-40-910)

6. The maximum allowable sulfur dioxide emissions from the combined boilers (Unit Nos. 1 through 9 inclusive) shall not exceed the following limit:

S = 2.64K,

where S = the allowable emission of sulfur dioxide expressed in pounds per hour and K = the heat input at total capacity expressed in Btu x  $10^6$  per hour.

(9 VAC 5-80-110 and 9 VAC 5-40-930)

- 7. Visible emissions from each of the boiler stacks (STK-1, STK-2, STK-3, and STK-4) shall not exceed twenty (20) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed sixty (60) percent opacity. (9 VAC 5-40-80 and 9 VAC 5-80-110)
- 8. Visible emissions from the emergency diesel generator stack (Unit No. EG-23) shall not exceed twenty (20) percent opacity except during one six-minute period in any one hour in which visible emissions shall not exceed thirty (30) percent opacity. (9 VAC 5-50-80 and 9 VAC 5-80-110)
- 9. The permittee shall not cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired or demolished without taking reasonable precautions to prevent particulates from becoming airborne.

  (9 VAC 5-40-90 and 9 VAC 5-80-110)
- 10. The maximum sulfur content of the coal combusted in Unit Nos. 1 and 2 shall not exceed 2.43% by weight.

(9 VAC 5-80-110, 9 VAC 5-40-900 and 9 VAC 5-40-930)

11. Boiler emissions shall be controlled by proper operation and maintenance. Boiler operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum.

(9 VAC 5-80-110)

#### **B.** Monitoring

1. The permittee shall perform periodic visual observations of the steam plant stack (STK-1) once weekly for compliance with opacity standards whenever Unit Ref. Nos. 1, 2, 3, 4, 5, or 6 are in operation. The permittee shall perform periodic visual observations of the emergency diesel generator stack (EG-23) once monthly for compliance with opacity standards whenever Unit No. EG-23 undergoes monthly testing. Such observations shall consist of one six-minute observation of visible emissions. If such a periodic observation indicates opacity greater than 20%, the permittee shall undertake a second six-minute observation of visible emissions. If the second observation also exceeds 20% opacity, the permittee shall take appropriate action to correct the cause of the opacity. Following corrective action, the permittee shall conduct a third six-minute observation of visible emissions. If corrective action has failed to correct the problem, the permittee shall conduct a visible emissions evaluation (VEE) utilizing EPA Method 9 (reference 40 CFR 60, Appendix A). If a Method 9 evaluation and/or corrective action becomes necessary, Hampton University shall record the details of the incident in a logbook. The logbook shall be kept on site and available for inspection by the DEQ for the most recent five (5) year period.

(9 VAC 5-80-110 and 9 VAC 5-40-110)

2. The permittee shall perform periodic visual observations of the boiler stacks (STK-2, STK-3, STK-4) once weekly for compliance with opacity standards whenever any of Unit Ref. Nos. 7, 8, or 9 are in operation and if the particular unit is, has been, or will be fired on distillate oil during that week. Such observations shall consist of one sixminute observation of visible emissions. If such a periodic observation indicates opacity greater than 20%, the permittee shall undertake a second six-minute observation of visible emissions. If the second observation also exceeds 20% opacity, the permittee shall take appropriate action to correct the cause of the opacity. Following corrective action, the permittee shall conduct a third six-minute observation of visible emissions. If corrective action has failed to correct the problem, the permittee shall conduct a visible emissions evaluation (VEE) utilizing EPA Method 9 (reference 40 CFR 60, Appendix A). If a Method 9 evaluation and/or corrective action becomes necessary, Hampton University shall record the details of the incident in a logbook. The logbook shall be kept on site and available for inspection by the DEQ for the most recent five (5) year period. (9 VAC 5-80-110 and 9 VAC 5-40-110)

# C. Recordkeeping

- 1. The permittee shall obtain a certification from the fuel supplier with each shipment of distillate oil and bituminous coal. Each fuel supplier certification shall include the following:
  - a. The name of the fuel supplier,
  - b. The date on which the oil or bituminous coal was received.
  - c. The volume of distillate oil or mass of bituminous coal delivered in the shipment,
  - d. A statement that the oil complies with the American Society for Testing and Materials specifications for fuel oil numbers 1 and 2, and
  - e. The sulfur content of the oil and the maximum sulfur content of the bituminous coal.

(9 VAC 5-80-110)

- 2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content and format of such records shall be arranged with the Tidewater Regional Director. These records shall include, but are not limited to:
  - a. Records of weekly and monthly visible emissions observations.
  - b. All fuel supplier certifications.
  - c. Boiler operational, maintenance, and operator training records.
  - d. Records of any stack tests.

These records shall be available on site for inspection by the DEQ and shall be current for the most recent five (5) years. (9 VAC 5-80-110)

3. The permittee shall maintain records of the required training including a statement of time, place and nature training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the boiler(s). These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ. (9 VAC 5-80-110)

# **D.** Testing

- 1. The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.
  - (9 VAC 5-40-30 or 9 VAC 5-50-30 and 9 VAC 5-80-110)
- 2. The permittee shall perform a stack test once every five (5) calendar years for the two coal-fired boilers (Unit Nos. 1 and 2) to demonstrate compliance with the PM and SO<sub>2</sub> emission limitations as specified in Permit Conditions III.A.5 and 6. The stack tests shall be performed in accordance with 40 CFR 60, Appendix A, Methods 5 and 6. The schedule for the stack tests shall be arranged with the Director, Tidewater Regional Office and shall begin five calendar years following the most recent stack test. The tests shall continue once every five years thereafter. If a stack test indicates a violation of emission limits, annual stack tests shall resume for the calendar year following the violation. The test report information shall contain a record of the sulfur content of the coal being burned during each test run. The permittee shall submit a test protocol to DEQ at least thirty (30) days prior to testing. A copy of the test results shall be submitted to the Director, Tidewater Regional Office within 45 days after test completion.

(9 VAC 5-80-110, 9 VAC 5-40-30, 9 VAC 5-40-900, and 9 VAC 5-40-930)

3. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

The following table is only required for those pollutants that have emission limits.

	v x
Pollutant	Test Method (40 CFR Part 60, Appendix A)
$SO_2$	EPA Method 6
PM/PM-10	EPA Methods 5, 17
Visible Emission	EPA Method 9

(9 VAC 5-80-110)

# IV. Process Equipment Requirements -Dry Cleaning (Emission Unit No. 10)

# A. Limitations

1. The air stream from the dry cleaning unit (Unit No. 10) shall be routed through a refrigerated condenser which maintains an outlet temperature of 7.2 degrees C (45 degrees F) or less or an equivalent control device.

(9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR 63.322 (b)(1))

2. The door of the dry cleaning unit (Unit No. 10) shall be closed immediately after article transfers and shall remain closed at all other times. (9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR 63.322 (c))

3. The dry cleaning unit (Unit No. 10) shall be operated and maintained in accordance with manufacturer specifications and recommendations. (9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR 63.322 (d))

The air stream contained within the dry cleaning unit (Unit No. 10) shall not be vented to the atmosphere while the drum is rotating.
 (9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR 63.322 (e)(1))

- 5. A diverter valve shall be used to prevent air drawn into the dry cleaning unit (Unit No. 10) when the unit's door is open from passing through the condenser. (9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR 63.322 (e)(3))
- 6. All cartridge filters (or other sealed containers) shall be drained in their housing for a minimum of 24 hours or be treated in an equivalent manner before removal from the facility.

(9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR 63.322 (i))

7. All perchloroethylene and wastes containing perchloroethylene shall be stored in tanks or containers with no perceptible leaks.

(9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR 63.322 (j))

8. The permitted facility is to be operated in accordance with the provisions of 40 CFR 63, Subpart M of federal regulations. The annual facilitywide usage of perchloroethylene shall not exceed 2,100 gallons per year calculated monthly as the sum of each consecutive 12-month period. Should the annual facilitywide usage of perchloroethylene exceed 2,100 gallons per year, the dry cleaning facility becomes a major source and all dry cleaning systems located at the dry cleaning facility must comply with the appropriate requirements for major sources under 40 CFR 63.322, 63.323, and 63.324 within 180 calendar days of the date that the facility determines it has exceeded the 2,100 gallon per year perchloroethylene consumption threshold. (9 VAC 5-60-20 and 40 CFR 63.320 (i))

# **B.** Monitoring

1. Provided the calendar year annual consumption of perchloroethylene at the facility does not exceed 140 gallons per year, the permittee shall perform biweekly inspections for perceptible leaks from the following components of the dry cleaning unit (Unit No. 10) while the unit is in operation: Hose and pipe connections, fittings, couplings, and valves; door gaskets and seatings; filter gaskets and seatings; pumps; solvent tanks and containers; water separators; muck coolers; stills; exhaust dampers; diverter valves; and cartridge filter housings. If the calendar year annual consumption of perchloroethylene at the facility exceeds 140 gallons per year, the permittee shall perform such inspections weekly. The permittee shall repair any perceptible leak within 24 hours or, if necessary, order repair parts within 2 working days and complete repair within 5 working days after receipt of ordered parts. Similarly, the permittee shall complete repairs if the monitored temperature values fail to meet the values specified under the monitoring requirements in Specific Condition IV.B.2 of this document.

(9 VAC 5-80-110, 9 VAC 5-60-100, and 40 CFR 63.322 (k), 63.322 (l), 63.322 (m), and 63.322 (n))

2. The temperature of the air stream on the outlet side of the condenser shall be measured weekly with a temperature sensor to determine if it is less than or equal to 7.2 degrees C (45 degrees F). The temperature sensor shall be used according to the manufacturer's instructions and shall be designed to measure a temperature of 7.2 degrees C (45 degrees F) with an accuracy of plus or minus 1.1 degrees C (2 degrees F).

(9 VAC 5-60-100 and 40 CFR 63.323 (a)(1))

3. The permittee shall consume no more than 825 gallons of perchloroethylene per year. The permittee shall calculate for each calendar year the annual consumption of perchloroethylene in gallons by December 31 of each year.

(9 VAC 5-60-100 and 40 CFR 63.323 (d))

# C. Recordkeeping

Hampton University shall maintain records of the following:

- 1. Receipts of all perchloroethylene (perc) purchased and the volume of perchloroethylene purchased each month in gallons;
- 2. Records of annual perchloroethylene consumption;
- 3. The dates when dry cleaning unit (Unit No. 10) components are inspected for leaks and the names of components for which leaks are detected (if any);
- 4. The dates of repair and records of written or verbal orders for repair parts;
- 5. The dates and results of all weekly condenser outlet temperature monitoring events; and
- 6. The dry cleaning unit (Unit No. 10) and condenser manufacturer design specifications and operating manuals.

These records shall be maintained in a logbook kept on site by Hampton University and shall be made available for DEQ inspection and shall be current for the most recent five (5) years.

(9 VAC 5-60-20 and 40 CFR 63.324 (d) and 63.324 (e))

# **D.** Testing

The permitted facility shall be constructed so as to allow for emissions testing at any time using appropriate methods. Upon request from the Department, test ports shall be provided at the appropriate locations.

(9 VAC 5-50-30 and 9 VAC 5-80-110)

# V. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
EG-1	Onan Generator, standby (Cafeteria)	5-80-720 C.4.c.	CO, NOx, VOC, SO <sub>2</sub> , PM	15 kW (natural gas)
EG-2	Onan Generator, standby (McGrew Towers)	5-80-720 C.4.c.	CO, NOx, VOC, SO <sub>2</sub> , PM	125 kW (natural gas)
EG-3	Onan Generator, standby (Armstrong Hall)	5-80-720 C.4.c.	CO, NOx, VOC, SO <sub>2</sub> , PM	75 kW (natural gas)
EG-4	Onan Generator, standby (Queen Street Dormitory)	5-80-720 C.4.b.	CO, NOx, VOC, SO <sub>2</sub> , PM	30 kW (diesel fuel)
EG-5	Onan Generator, standby (Whipple Barn)	5-80-720 C.4.c.	CO, NOx, VOC, SO <sub>2</sub> , PM	100 kW (natural gas)
EG-6	Onan Generator, standby (Science Tech)	5-80-720 C.4.b.	CO, NOx, VOC, SO <sub>2</sub> , PM	125 kW (diesel fuel)
EG-7	Onan Generator, standby (DuBois Hall)	5-80-720 C.4.c.	CO, NOx, VOC, SO <sub>2</sub> , PM	70 kW (natural gas)
EG-8	Onan Generator, standby (Stone Building)	5-80-720 C.4.c.	CO, NOx, VOC, SO <sub>2</sub> , PM	150 kW (natural gas)
EG-9	Generac Generator, standby (Ogden Hall/Mansion House)	5-80-720 C.4.c.	CO, NOx, VOC, SO <sub>2</sub> , PM	600 kW (dual fuel)
EG-10	Onan Generator, standby (Marine Science)	5-80-720 C.4.c.	CO, NOx, VOC, SO <sub>2</sub> , PM	30 kW (natural gas)

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EG-11	Caterpillar Generator, standby (Wilder Hall)	5-80-720 C.4.b.	CO, NOx, VOC, SO <sub>2</sub> , PM	225 kW (diesel fuel)
EG-12	Onan Generator, standby (Infirmary)	5-80-720 C.4.c.	CO, NOx, VOC, SO <sub>2</sub> , PM	7.5 kW (natural gas)
EG-13	Generac Generator, standby (Pump Station)	5-80-720 C.4.b.	CO, NOx, VOC, SO <sub>2</sub> , PM	32 kW (diesel fuel)
EG-14	Onan Generator, standby (Convocation Center)	5-80-720 C.4.b.	CO, NOx, VOC, SO <sub>2</sub> , PM	230 kW (diesel fuel)
EG-15	Delco Generator, standby (Steam Plant)	5-80-720 C.4.b.	CO, NOx, VOC, SO <sub>2</sub> , PM	100 kW (diesel fuel)
EG-16	Onan Generator, standby (Mobile Unit)	5-80-720 C.4.b.	CO, NOx, VOC, SO <sub>2</sub> , PM	150 kW (diesel fuel)
EG-17	Onan Generator, standby (Computer Center)	5-80-720 C.4.c.	CO, NOx, VOC, SO <sub>2</sub> , PM	75 kW (natural gas)
EG-18	Caterpillar Generator, standby (Harvey Library)	5-80-720 C.4.b.	CO, NOx, VOC, SO <sub>2</sub> , PM	225 kW (diesel fuel)
EG-19	Generac Generator, standby (Holland Hall)	5-80-720 C.4.c.	CO, NOx, VOC, SO <sub>2</sub> , PM	300 kW (dual fuel)
EG-20	Onan Generator, standby (Olin Engineering)	5-80-720 C.4.c.	CO, NOx, VOC, SO <sub>2</sub> , PM	75 kW (natural gas)
EG-21	Kohler Generator, standby (Early Childhood)	5-80-720 C.4.c.	CO, NOx, VOC, SO <sub>2</sub> , PM	25 kW (natural gas)
EG-22	Kohler Generator, standby (Turner Hall)	5-80-720 C.4.c.	CO, NOx, VOC, SO <sub>2</sub> , PM	70 kW (natural gas)
EG-24	Generac Generator	5-80-720 C.4.c.	CO, NOx, VOC, SO <sub>2</sub> ,	180 kW (diesel)

	(Student Center)		PM	
EG-25	Onan Generator (Scripps Howard)	5-80-720 C.4.c.	CO, NOx, VOC, SO <sub>2</sub> , PM	40 kW (natural gas)
CH-1	Coal Handling and Storage Facility	5-80-720 B.1.	PM	NA
S-1	Paper Pellet Silo	5-80-720 B.1.	PM	340 lbs/hr
S-2	Ash silo and load- out facility	5-80-720 B.1.	PM	40 tons; dimensions: 15 ft. diameter, 30 ft. height
T-1	Diesel oil storage tank (installed before 1972)	5-80-720 B.1.	VOC	25,000 gallons
T-2	Diesel oil storage tank (installed before 1972)	5-80-720 B.1.	VOC	20,000 gallons
T-3	Diesel oil storage tank (installed before 1972)	5-80-720 B.1.	VOC	20,000 gallons
T-4	Diesel oil storage tank (installed before 1972)	5-80-720 B.1.	VOC	1,000 gallons
PEL-1	Pelletizing Facility	5-80-720 B.1.	PM	340 lbs/hour

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

#### VI. **Permit Shield & Inapplicable Requirements**

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
None identified	None identified	None identified

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law.

(9 VAC 5-80-140)

# VII. General Conditions

# A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

# **B.** Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

- 1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- 2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
- 3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
- 4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- 5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D, and 9 VAC 5-80-170 B)

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# C. Recordkeeping and Reporting

- 1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
  - a. The date, place as defined in the permit, and time of sampling or measurements.
  - b. The date(s) analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.
  - e. The results of such analyses.
  - f. The operating conditions existing at the time of sampling or measurement. (9 VAC 5-80-110 F)
- 2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

  (9 VAC 5-80-110 F)
- 3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than <u>March 1</u> and <u>September 1</u> of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
  - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
  - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
    - (1) Exceedance of emissions limitations or operational restrictions;
    - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or
    - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

# **D.** Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- 1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- 2. The identification of each term or condition of the permit that is the basis of the certification.
- 3. The compliance status.
- 4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- 5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- 6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00) U. S. Environmental Protection Agency, Region III 1650 Arch Street Philadelphia, PA 19103-2029

(9 VAC 5-80-110 K.5)

# E. Permit Deviation Reporting

The permittee shall notify the Director, Tidewater Region within four daytime business hours after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition VII.C.3. of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

# F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Tidewater Region by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Tidewater Region.

(9 VAC 5-20-180 C)

# G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

# H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

# I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

#### J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. (9 VAC 5-80-190 and 9 VAC 5-80-260)

# **K.** Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

#### L. Duty to Submit Information

- The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
   (9 VAC 5-80-110 G.6)
- 2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G.

  (9 VAC 5-80-110 K.1)

#### M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by April 15 of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. (9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

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# N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- 1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- 2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- 3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
- 4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and
- 5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

# O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E and 9 VAC 5-40-20 E)

# P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)

# Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- 1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- 4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

# **R.** Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

- 1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- 2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

#### S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request.

(9 VAC 5-80-150 E)

#### T. Transfer of Permits

- No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another. (9 VAC 5-80-160)
- 2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)
- 3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)

#### U. Malfunction as an Affirmative Defense

- 1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
- 2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
  - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
  - b. The permitted facility was at the time being properly operated.
  - c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
  - d. The permittee notified the board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.

- 3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
- 4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

#### V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80 Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any of the grounds for revocation or termination or for any other violations of these regulations. (9 VAC 5-80-190 C and 9 VAC 5-80-260)

# W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit. (9 VAC 5-80-80 E)

# X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

#### Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Standards for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.148), and Standards for Waste Disposal (40 CFR 61.150).

(9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

# **Z.** Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

# **AA.** Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (9 VAC 5-80-110 I)

# **BB.** Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- 1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
- 2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- 3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.

(9 VAC 5-80-110 I)

# **VIII. State-Only Enforceable Requirements**

The following terms and conditions are not required under the federal Clean Air Act or under any of its applicable federal requirements, and are not subject to the requirements of 9 VAC 5-80-290 concerning review of proposed permits by EPA and draft permits by affected states.

- 1. Odor (9 VAC 5 Chapter 40, Article 2)
- 2. State toxics rule (9 VAC 5 Chapter 60)

(9 VAC 5-80-110 N and 9 VAC 5-80-300)